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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,976	01/16/2002	Derek J. Hei	282172000902	3174
25226	7590	11/05/2003	EXAMINER	
MORRISON & FOERSTER LLP 755 PAGE MILL RD PALO ALTO, CA 94304-1018			NAFF, DAVID M	
			ART UNIT	PAPER NUMBER

1651

DATE MAILED: 11/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/051,976

Applicant(s)

HEI ET AL.

Examiner

David M. Naff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 27-54 is/are pending in the application.
- 4a) Of the above claim(s) 10-24 and 27-54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

The amendment of 8/20/03 amended claims 1, 2, 5 and 8, and canceled claims 25 and 26.

Claims 10-24 and 27-54 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected  
5 invention. Election was made **without** traverse in Paper No. 11 filed 2/27/03.

Claims examined on the merits are 1-9.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10 ***Claim Rejections - 35 USC § 112***

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

15 The claims are confusing and unclear by claim 1 not having antecedent basis for "free" recited in line 4. It is suggested that - -- free --- be inserted before "low" in line 2. Additionally, in line 4, "free" should be deleted and reinserted before "low".

***Claim Rejections - 35 USC § 103***

20 Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wollowitz et al (5,593,823) in view of Tsyurupa et al (193 on form 1449) and Davankov et al (110 on form 1449) for reasons set forth in the previous office action of 5/20/03.

25 Method claims 1-9 are drawn to removing a free low molecular psoralen compound from a blood product by contacting the blood product with a hypercrosslinked resin to remove at least substantially all of the free psoralen compound.

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Wollowitz et al disclose adding psoralen compounds to inactivate pathogens in blood products, or blood products in synthetic media (col 1, line 17, and col 3, line 41) containing phosphate (col 5, line 29), irradiating and then removing free psoralen compounds from the blood with various adsorptive materials (col 53, lines 46-64) including Amberlite XAD-4 (col 53, line 50).

Tsyurupa et al and Davankov et al disclose using hypercrosslinked polystyrene-divinylbenzene copolymers for sorption and removal of a variety of organic compounds from aqueous mediums. The hypercrosslinked copolymers have exceptional high adsorption capacity. For example, see Tsyurupa et al (page 69, right col, lines 14-17, and page 70, left col, lines 6-10).

It would have been obvious to substitute for the Amberlite XAD-4 adsorbent resin of Wollowitz et al, the hypercrosslinked polystyrene-divinylbenzene copolymer taught by Tsyurupa et al and Davankov et al for the expected advantage of the hypercrosslinked copolymer providing exceptional adsorption capacity. Since both Amberlite XAD-4 and the hypercrosslinked copolymer are polystyrene-divinylbenzene copolymers and are essentially the same except for hypercrosslinking, it would have been expected that the hypercrosslinked copolymer would provide the sorption function of Amberlite XAD-4 required by Wollowitz et al of removing free psoralen compounds from treated blood or synthetic blood media.

#### ***Response to Arguments***

It is granted as urged by applicants that Wollowitz et al does not disclose a deficiency in the XAD-4 adsorbent used. However, Wollowitz et al is not applied alone but in combination with the

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Tsyurupa et al and Davankov et al references which disclose using a hypercrosslinked polystyrene-divinylbenzene copolymer because of its exceptionally high adsorption capacity. Tsyurupa et al show a comparison with XAD-4 (Tables 4, 5 and 6), and found that the hypercrosslinked copolymer has superior adsorption capacity.

Therefore, the hypercrosslinked copolymer would have been expected to be advantageous in Wollowitz et al by providing superior adsorption capacity.

#### ***Double Patenting***

Claims 1-9 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 53-110 of copending Application No. 09/972,323 or claims 53-115 of copending Application No. 10/011,202. Although the conflicting claims are not identical, they are not patentably distinct from each other because the presently claimed invention would have been obvious from the claims of the copending applications drawn to using an adsorbent material which can be a hypercrosslinked resin to remove psoralen compounds from blood products.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

#### ***Response to Arguments***

Applicants assert that because of notice of appeals and briefs being filed in the copending applications, they do not expect the copending applications to issue prior to the present application.

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However, since no claims have been allowed in this application, whether this application will issue before or after the copending applications cannot be determined.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the

5 extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after  
10 the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX  
15 MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Naff whose telephone number is 703-308-0520. The examiner can normally be reached on Monday-Friday 9:30-6:00.

20 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 703-308-4743. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

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David M. Naff  
Primary Examiner  
Art Unit 1651

10 10/31/03  
DMN